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Abstract

Having divided those aspects of linguistics which have direct concern with the teaching of reading into two general types--phonology and usage (content and structure)--it was stressed that a teacher can employ both, understanding that initial recognition of sound symbols is necessary and that the point of developing reading skill is to enable children to grasp concepts in context. A summary of the role of linguistics as it developed in the teaching of reading reviewed generally accepted principles about our language and its use. An eclectic approach to teaching reading was outlined, stressing that (1) letters should be learned before words and words before much exposure to large sentence patterns; (2) speech must come first, then writing and reading; (3) consistent words should be taught before inconsistent words; and (4) basic words and patterns should be presented before uncommon words and patterns. Techniques such as expansion, coupling, cueing, mobility activities, slotting, additive activities, scrambling, skimming, and cloze exercises were recommended. An analysis of the vocabularies in beginning readers published by four companies showed that the sound symbols for which children develop skill in later years--such as r's, s's, and t's--were stressed in the texts' vocabularies. References are included. (BT)

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LINGUISTICS AND EARLY READING SKILLS

RE 002 314

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Let us begin with the fact that there are many types of linguists. Postman and Weingardner indicated eight different types of linguists: (1)

1. those who are involved in Dialect Study,
2. those who are involved in the study of Grammar,
3. those who study Descriptive Linguistics,
4. those who describe the Language History,
5. those who are concerned with Usage,
6. those who are studying the Lexicography,
7. those interested in Semantics, and
8. those involved in Psycho-Linguistics.

Realistically, only two of these have any direct concern with Reading and its instruction. We have those concerned with Usage and those concerned with Phonology. Commonly these two approaches are called "THE PHONOLOGY APPROACH AND THE STRUCTALISTS APPROACH." The first person to concern himself with the science of "Linguistics and Phonology" especially applied to the teaching and reading was Leonard Bloomfield, who in 1942 wrote the "Phonologist Approach to Teaching and Reading." He was given little recognition until after his death. Other pioneers in the "Phonologist Approach" were Robert Hall, Henry Ree Smith, C.C. Fries, Lynn Goldberg, and Donald Rasmussen. Recent studies in the use of the "LINGUISTIC APPROACH" indicate that the phonologists have a concept of reading and translation of the actual sounds for which each letter stands. First with spoken sounds, then into words, then possibly later into sentences. Whether the process deals with meaningful units seems unimportant or subordinate to the translating into sound and at first glance it seems like an ultraphonic approach. The phonologists deny this similarity. Goldberg and Rasmussen in their article "Linguistics in Reading" have listed some findings that might be

1. that English is an alphabetic language and advisable to teach the alphabetic principle before attempting to teach the child to read.
2. That there are about 46 elemental speech sounds or phonemes in the English language with each phoneme represented in writing by one or more letters, with some letters representing two or more phonemes. Therefore, there is not a complete regularity in the symbol-sound relationship with English. It is necessary in teaching reading to set forth the regularly spelled words from those with irregular spelled patterns. The regularly spelled words can be presented in pattern groups and the irregularly spelled words can be presented separately.
3. That the skill of associating sounds with symbols should be separate from the aim of deriving meaning so that the beginner can concentrate on the skill-meaning is the goal of all reading. but meaning will not exist until the symbol is translated into the child's own language. Then it will have meaning for him.

Rasmussen and Goldberg agree with some aspects of Bloomfield's approach but as a result of their own experimentation have changed his techniques in some ways. They do not believe it is necessary to present all the regularities and spelling before any irregularly spelled words are introduced. The important thing is to be sure that the child knows the existence of regular and irregular words and that the learning of one word does not interfere with another; they present some irregular words in order that they can use some readable literature. They do not use any nonsense words such as Bloomfield did. Rasmussen and Goldberg believed that as they continued to use linguistic principles they would

find other alternations which would increase the effectiveness of the program without sacrificing the linguistic point of view. Warfeld (10) and Lloyd in "School and Society" state that the school should focus during the first few months of unlocking the child's repertoire so he can benefit from varied sensory patterns. According to these two authorities the disappointment in reading in the United States arises from inability of students to find a common ground between their known readiness to speak and the need to read more and more complex thoughts. They feel that a recognition of the structural principles of law and order is a must and that this compromises the major act of reading. Only a few hundred structured words are linked in the groups and they must be read as groups. Lefevre (3) expands this idea and stresses recognition of larger speech patterns and in depth patterns and that if a child is reading for word groups he must also know the depth pattern before he can see this. Although there may be some discrepancies due to my own ignorance, when discussing these two different approaches to linguistics, I believe essentially the intent is accurate. When we begin to look at the theories and their applications to the reading process, we begin to see some reading patterns which though "different" are similiar in many respects.

A. The first principle is that we have a very consistent language;

B. the second principle is that writing is a representation of that spoken language.

C. The third principle is that reading involves decoding of the written symbols.

D. A fourth principle is that listening is oral decoding of language. This is the "communication process and the linguistic and reading process."

E. The structure of language and reading are important. The secret

language,-such as inferences, tonal aspects, cues, are important points that allow us to see the structure of the language, and therefore the intent. Eclectic linguistic elements then are:

1. that the letters be learned before exposures to words, and words exposed before much exposure to large complex sentence patterns,

2. speech comes first, writing comes second along with reading,

3. consistent words should come before inconsistent words,

4. basic patterns should come before uncommon patterns, basic common words should come before less common words.

In summary, the phonologists believe that reading is primarily a process of rapid recognition of the symbolic representation of our language, whereas the structuralists believe that there are certain essential structural elements that we should look for such as phrases, clauses, noun-groups, or verb-groups. Any other definition by reading people is generally considered a use of reading rather than a definition of the reading process. There is an attempt by the structuralist to include meaning as a basic element of reading. There are certain generalizations which have also been pushed by linguists and that we should begin our "word" attack by concentrating on the constant sounds and the more common appearing words such as the consonant vowel, consonant words such as c, -v, -c, and the consonant-vowel-vowel-consonant c, vv, c words as being the more regular appearing ones. This is not unrealistic but is not entirely new either. A common statement is made about how consistent our language is; our language is consistent. Our mode of representing that language is very inconsistent and regardless of the different decoding systems which have been developed to by-pass some of the lack of consistency in our words, we still are faced with the real world of books and reading, a task which must go on. Children do learn how to read,

however, they are not reading just for symbols or rapid recognition, they are reading for meaning and content; they are not reading just for structure; they are reading for the total communication that can take place between the author and the reader,and even though these are formulated using a language system, there will never be complete communication between the two as each is working with his own contextual vocabularies.

LINGUISTICS AND EARLY PRIMARY READING

I would like to start with a recent comment by David Krech (4) who states that almost every psycho-linguist is impressed not only with the unique nature of language itself but by the unique mode of achievement of the child. Whatever value of so-called re-enforcement or stimulus response theories of learning have for describing how these motor skills were acquired are at this stage of the game considered completely trivial and utterly irrelevant when it comes to understanding this stunning intellectual achievement. The acquisition of language by the child and in fact when reading of psycho-linguist's work, we are left with the impression that we will have to develop a specific learning theory to describe how language behavior islearned. He even indicates that if we ever achieve this understanding of how language is learned then we will also learn how to push the human brain with this human experience and then we will be well on our way to understanding learning and all learning behavior. Krech also states that recent research has shown that speech sounds which are the component parts of words begin as reflexive responses in infancy and to follow our course of orderly development these unit speech sounds are a stable entity which can be counted and classified as to manner and frequency of utterance. Templin, after much study, states that most children have mastered the vowel sounds by the time they are three years of age. Templin also states that practically all sounds are produced with a high degree of accuracy by seven year old normal children. She also states that girls reach approximately ninety five percent correct articulation while boys need another year to reach this degree of perfection. Those sounds

not correctly articulated by ninety percent of the six year old subjects were "s", "sh", "th", "z", "zh", "aw", "hw", and "ch".(5) Anderson (6) from Language Skills and Elementary Education states that the "s" sound is the most frequent defect in a child's language. Poole found similar findings to Templin, except that there were minor differences in the developmental stages of when the sounds were developed in the speech language of the children.(7) Van Riper had this to say about the mastery of sounds:(8) "A certain degree of maturation is required for mastery for both the reading and speaking skills. The average child for example does not attain complete mastery of the s, l, r, th sounds or their blends until the age of eight years. Speech therapists feel a need to work with a kindergarten child who shows some inconsistent errors on these sounds. In this regard, a speech pathologist shudders a bit when he looks at the usual first primers because they seem expressly loaded with these late maturing sounds." "Look and see, say and run, Sally run" probably fix and perpetuate consonant errors which otherwise would be out-grown.

In 1966, Stone (9) made a study of 6,000 words and Basic readers of grades one, two and three. It was found that greater variability of sound similar relationships occurred for vowels as compared to consonants. There were fifty four percent regular long vowels as compared to forty pereent irregular. There were 567 regular short vowels as compared with 107 irregular without the short "u". The short "u" had 103 regular and 108 irregular. There were 3526 regular consonants as compared with 444 irregular. The practical application lies in making clear the emphasis needed in teaching the most frequent sound symbol combinations first. The implications of these data are that there are definite sound patterns in speech development and that if these patterns are recognized, then there should be a high degree of coordination

with the order of presentation of these sounds in the early reading skills. Therefore, using the table from Poole's and Templin's studies, (7,5) we decided to make a sound count in the pre-primers, primers, and first readers from four different Basal readers, American Book Company, Scott-Foresman, Houghton Mifflin, and Allyn and Bacon. The sounds we were most interested in were, according to Poole's table, the s, z, hw, r, th, and ch would be the later developing sounds, developing at approximately age seven to seven and a half. Now this would represent the upper level of normality in most youngsters. This was called normal by saying that any sound may and often does appear before the age indicated. All the Basal readers were quite similar and the vocabularies were highly controlled. Scott-Foresman presented 123 new words with a total of 1115 sounds being considered. Houghton Mifflin introduced 344 new words with a total of 1148 sounds. Allyn and Bacon introduced 340 new words with a total of 1160 sounds, and American Book Company introduced 307 new words with a total of 1046 sounds. In all readers studies, the vowel sounds compose approximately thirty five percent of all the sounds of the words. There is a sharp decline to approximately seven and a half percent for the second most frequent sound. In two of the series, "r" was the second most frequent sound and two of the others- "t" was the most--second most--frequent sound with "r" being fourth and third respectively. There was very little variation between the Basal Reader series in comparing which sounds were presented at each level, however, there was a noticeable discrepancy between the presentation of sounds and the age level of speech development in a child's language. It would seem that if language development patterns were followed that the most frequently used sounds would be those that appear earliest at the three and a half to four and a half year levels, and that the least frequently used sounds would be those that appear at the

seven and a half year levels. Most teachers and speech therapists agree that the "r" sound is one of the most difficult sounds for first grade children and yet the "r" sound is used as the second most frequent in two of the series,and third and fourth in the other two series. By contrast, the "y" was one of the sounds that is stablized earlier in the child's development and yet it was introduced only infrequently in all the series. The later developing sounds include the "r", the "s", the "z", and the "l", the "t" sounds, as all these had a high level of frequency and yet one of the later rates of speech development in ordinary learning children. At the present time, we are attempting to replicate this study with some of the linguistic series now on the market, although the findings are not yet complete at this time. Even though we are finding more consistent word patterns, we are still finding many of the same sounds which would not be consistent with normal speech development. If speech comes first, then some recognition should be taken of that area before being further involved in the person's reading and writing skills.

Let me summarize before I get to the third part of my paper discussing some of the reading skills which might satisfy both the Linguists and the Reading Specialists. There seems to be a fairly good agreement that you begin with decoding and then move to larger language structures and then into reading structures that train the child to recognize the structure of his language both orally and in writing. Writing and spelling then are important aspects of language as well as reading and listening. The English language is regular where as language symbols or codes are irregular. There is a need to understand oral language and that if may interfere with written decoding. This fact is especially true among the disadvantaged or the language handicapped youngster. It is necessary to teach these children that there

is a higher level of thinking involved in language, and understanding that all people have a consistent language pattern even if the dialect is different. The relationship of speech patterns to spelling patterns should be emphasized more; when we teach reading we are trying to teach a child to read his language. Teach that every child, no matter hew he speaks, ,has a language, but that it may not be as we represent it in print and we are only trying to teach him how to read it. I feel that non-linguistic teachers can teach good linguistic patterns with a little bit of understanding of what linguistics is. I personally feel that spelling is more than morpheme or grapheme relationships and their relationships to language meaning must be related to oral language.

We must understand that the most commonly used words change least and tend to preserve words longest,and as the usage changes are the last to change, these words should be taught early in the child's spelling and reading history.

I personally feel that the teacher is most important and must use an eclectic approach when trying to involve linguistics and reading in a combined approach. By eclectic approach I mean that context is probably the most important element in all the skills of elements in reading. You cannot teach vocabulary without that word being in the context of some meaning or a sentence. By contrast, you cannot teach spelling efficiently as an integrated approach to meaning. There are spelling decoding or word recognition skills and there are context and vocabulary building type skills. When involving comprehension, context is the most important element, even though at the beginning stages where recognition must be a most important element and we are trying to have more consistency and repetition, we must do so without sacrificing the context, the meaning, the beauty of the words and the pure language involved. We must consider the use of context as the most important word recognition skill that a child has. He must learn to recognize many, many words with instant recognition and only rely upon the configuration or the patterns of these words when he is stumped for understanding or meaning. Some illustrative reading and linguistic skills might be in order at this time.(11)

1. <u>Expansion technique</u>:

Always use the language as much as you can in the classroom so that the young child begins to hear the patterns of your language and compares it with his language. This can be done with many different techniques asking why and how; asking what if; accepting short, choppy sentences at first and asking the child to expand them to longer and longer sentences; more informative sentences, then building on each other.

2. Coupling tecniques:

This is simply the forming of compound sentences or more complex sentences- orally from separate simple sentences.

3. Cueing techniques:

Here the emphasis would be on cueing on key words, or words receiving special intonation, or giving special intonation, etc.

4. Mobility techniques:

A "mobility activity" consists of reorganizing sentences or placing movable parts- such as parts of words, words, phrases, clauses, etc. in different positions which are suggested by, and approved by, the group of children. Active-passive activities can also be used by having children change passive words in a sentence to active words in a sentence. This would be done orally first, and then followed up with written activities.

5. Slotting:

This activity would consist of opening a slot in a sentence by eliminating a word at first, then as the children can handle a phrase, then a whole clause, encouraging them to "cloze" with their own words. These words then become part of the entire sight vocabulary and are incorporated into their reading program.

6. Additive techniques:

These activities consist of creating extended paragraphs by having children add supplementary sentences or illustrative sentences to a topic sentence that has been written on the board. These can be done orally, and later in writing.

7. Scrambling techniques:

These activities consist of a series of phrases, clauses, and later, sentences and have children combine them into an oral sentence or paragraph; obviously this would be to put them into sequential order according to some format.

8. Skimming techniques:

Essential meaning and topic sentences would be selected by the child and then words with special intonation or special cues are recognized and poimted out.

9. Cloze technique:

This technique is especially useful for recognizing words in context. If you are writing your own material, then every fifth or every seventh word may be blanked out of the paragraph and the child is to try to focus on the missing word to try to guess what should be there. An option to this would be to have the child learn to spell certain difficult words by leaving out certain key vowels or blends or prefixes or suffixes to the word so that the child would focus attention on a given part of the word if he was having trouble in this area.

All these activities should first start with oral language and then go to both written and reading activities. They can be applied to building comprehension skills looking for vocabulary meanings or additional meanings for the same vocabulary word. They can be used as a word recognition or decoding activities by using certain key words for recognition work.

In general, these activities are no different than many teachers are already doing. I'm sure that I'm looking at these from a biased point of view, but I would feel that these would be acceptable to most linguists as they are trying to build recognition of the structure of our language, recognition of

language patterns, recognition of words within those patterns, and sounds within those patterns, while they are also developing sound reading skills for early primary readers.

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